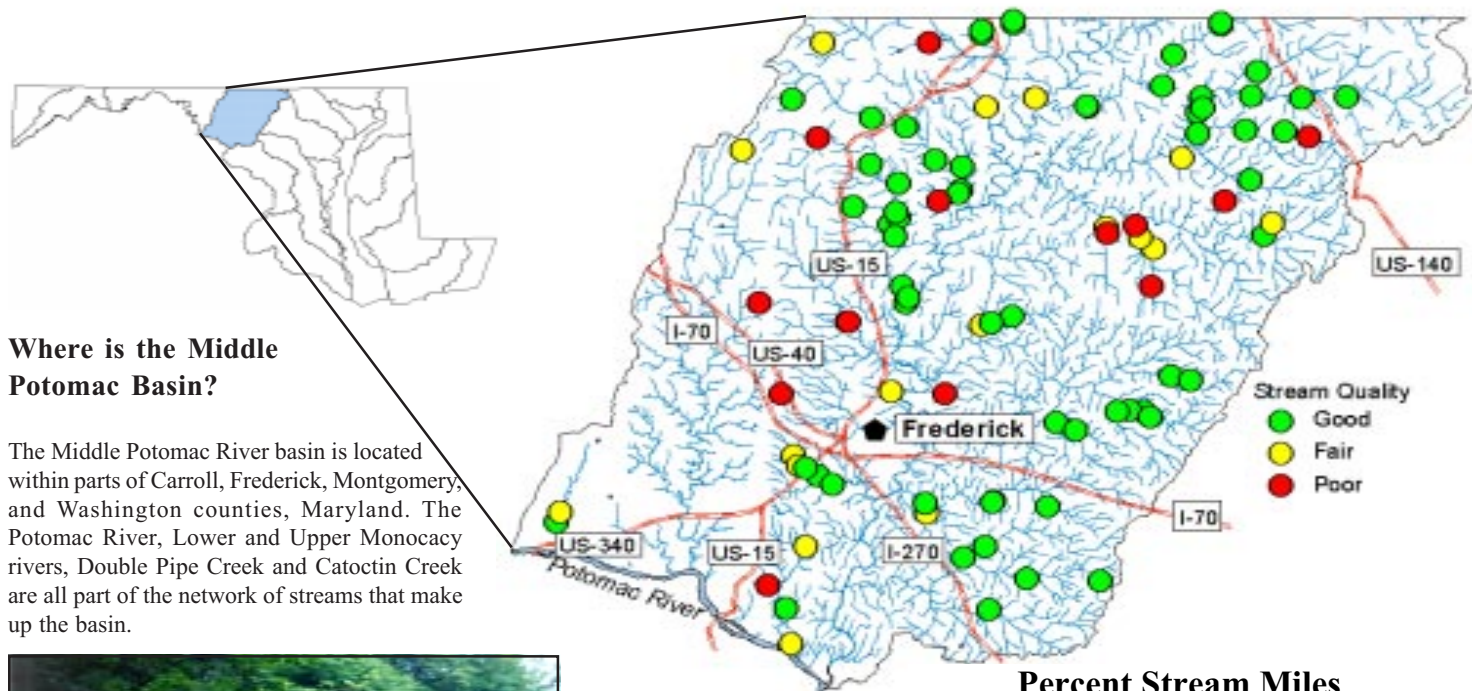




Middle Potomac River Basin

Current Status of Wadeable Streams



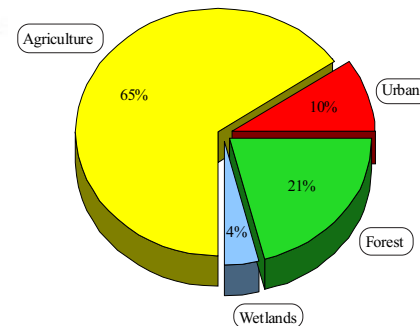
Where is the Middle Potomac Basin?

The Middle Potomac River basin is located within parts of Carroll, Frederick, Montgomery, and Washington counties, Maryland. The Potomac River, Lower and Upper Monocacy rivers, Double Pipe Creek and Catocin Creek are all part of the network of streams that make up the basin.



Cunningham Falls on Hunting Creek at Catocin Mountain State Park.

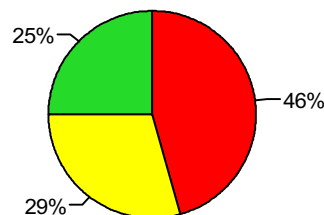
Land Use in the Basin



The Middle Potomac River basin covers an area of 943 square miles with a population density of 312 people per square mile. The land in the basin is primarily used for agriculture.



Percent Stream Miles Per FIBI Category



The Fish Index of Biotic Integrity is a measurement of stream quality based on fish communities.

What Lives in Our Streams? *

Estimated Fish Abundance:	8.5 million
Number of Fish Species:	50
Number of Gamefish Species:	5
Number of Reptile and Amphibian Species:	20
Number of Freshwater Mussel Species:	3

*Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1995.

Water Quality



Oxygen - None of the streams had oxygen levels below the state water quality standard of 5 mg/L.



Nitrate - 84% of the streams had nitrate levels that may affect aquatic life (>1 mg/L). The main sources of nitrates are farm fertilizers and acid rain.



Buffering Capacity - All of the streams in the basin are well buffered against acid rain.



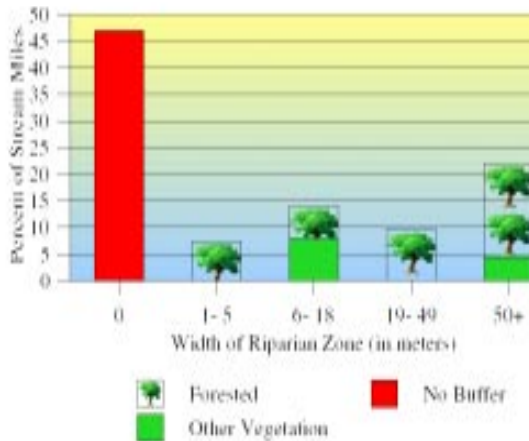
Good

Fair

Poor

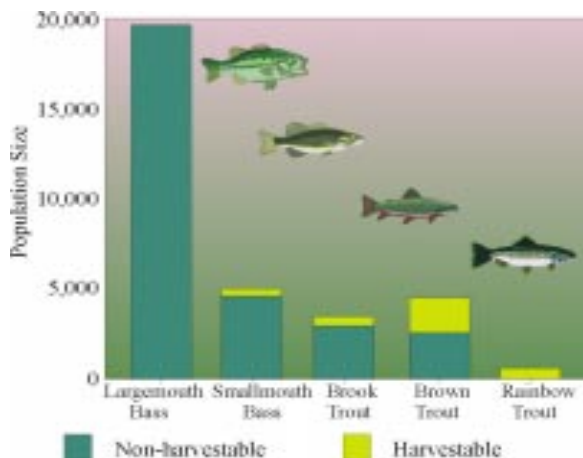
Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Middle Potomac basin are in poor condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



Gamefish

There are five gamefish species in the wadeable streams of the Middle Potomac basin. Since most of the individuals were not of harvestable size, it appears that the wadeable tributary streams in the basin serve as a nursery for these species.



Did You Know???

- ◆ The Potomac River got its name from its early settlers, the Pawtawmecks, members of the Algonquin nation.
- ◆ The Monocacy River is the second largest tributary to the Potomac River.
- ◆ The Middle Potomac basin contains a portion of C&O Canal National Historical Park. The conversion of the former railroad created a 184 mile trail for hikers and cyclists.
- ◆ We may be losing an irreplaceable part of our natural heritage. At present, there are at least four fish species in the basin at risk of local extinction: comely shiner, creek chubsucker, pearl dace and swallowtail shiner.



Pearl dace, an uncommon species, is found in the Middle Potomac basin.

Community Involvement

Want to help? These community groups can show you how!

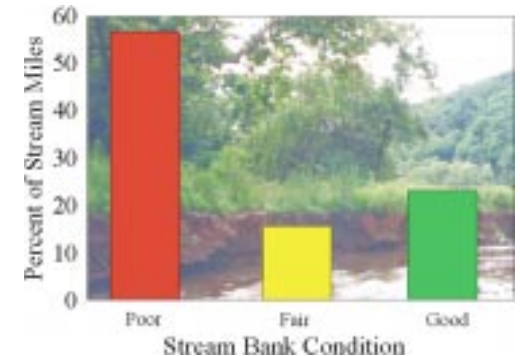
Alliance for the Chesapeake Bay
6600 York Road, Suite 100
Baltimore, MD 21212
Kathleen Millan (410) 377-6270

Potomac River Greenways Coalition
6110 Executive Blvd, Suite 300
Rockville, MD 20852-3903
Lisa Gutierrez (301) 984-1908



Stream Bank Stability

Eroded, unstable banks reduce habitat quality in streams and contribute to water quality problems in downstream areas. The banks of the Middle Potomac basin streams are suffering. As lands within the basin were developed for agriculture and later urbanized, many miles of stream banks became highly eroded. Since the streams in this basin drain into the Chesapeake Bay, this bank instability causes an increase in downstream transport of nutrients and suspended sediments in the Bay.



Recreation

Catoctin Mountain State Park, South Mountain State Park, and the Appalachian Trail provide recreational opportunities in the basin. Popular activities in the basin include fishing, canoeing, camping, hiking, and swimming.



Two children play in Catoctin Creek, at Catoctin Mountain State Park.

For more detailed information on streams in the Middle Potomac River basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8611 or email asmith@dnr.state.md.us.